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William E. Lewis			BURGE, LONDRA C	
Ryan, Mason & Lewis LLP 90 Forest Avenue			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.





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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 09/624,963

Filing Date: July 25, 2000 Appellent(s): KEYSER ET AL. JUN 0 2 2005

Technology Center 2100

William E. Lewis For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed October 14, 2004.

HC

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(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and interferences

A statement identifying the related appeals and interferences, which will directly affect or be

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directly affected by or have a bearing on the decision in the pending appeal is contained in the

brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief

is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Claims 1-4, 11, 19 and 23-25 do not stand or fall together. Claims 1-4, 24 and 25 stand or fall

together. Claim 11 stands or falls alone. Claim 19 stands or falls alone. Claim 23 stands or falls

alone.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

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6,128,633	MICHELMAN ET AL.	Filed 03/1997
5,838,819	RUEDISUELI ET AL.	Filed 11/1995
5,911,146	JOHARI ET AL.	Filed 05/1996
6,502,114 B1	FORCIER	Filed 10/1998
5,805,118	MISHRA ET AL.	Filed 12/1995
5,909,221	NAKAI ET AL.	Filed 12/1995

# (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

# **DETAILED ACTION**

This action is responsive to communications: amendment filed 1/16/2004 to the application filed 7/25/2000.

In the amendment: claims 1-25 are pending and claims 1, 24 and 25 are independent claims

#### **Drawings**

The drawings were received on 1/16/2004. These drawings are accepted.

# Allowable Subject Matter

Claims 5-10, 12-18 and 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, and 24-25 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Michelman et al. (herein after Michelman), U.S. Patent No. 6,128,633 filed March 1997 issued October 2000 in view of Ruedisueli et al (herein after Ruedisueli), U.S. Patent No. 5,838,819 filed November 1995 issued November 1998.

In regard to independent claim 1, Michelman teaches of "A system for manipulating page-breaks in an electronic document. A User Interface Process provides a graphical user interface allowing a user to select a page-break within an electronic document and then identify a new location for the page-break (Michelman Abstract Lines 1-5).

Michelman does not specifically teach of a obtaining the data from a handwriting system. However, Ruedisueli teaches of a system includes a processor for processing the handwritten notes to generate the electronic copies, with each electronic copy associated with a respective identifier corresponding to at least one set of the respective handwritten notes, in which the identifiers facilitate the management of the electronic copies. The system includes an electronic notepad and can also include devices operatively connected to the electronic notepad for operating with the electronic notepad to receive, manage, merge, and/or display the electronic copies from the electronic notepad. (Ruedisueli Abstract Lines 2-12; compare with claim 1,

"... obtaining electronic ink data from the handwriting system, the ink data being associated with the electronic document; and automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertions in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system."). It would have been obvious to one of ordinary skill at the time of the invention to apply Ruedisueli to Michelman, providing Michelman the benefit of adding and electronic notepad that include devices operatively connected to the electronic notepad for operating with the electronic notepad to receive, manage, merge, and/or display the electronic copies from the electronic notepad as taught by Ruedisueli Abstract Lines 8-12 to the automatic page break pagination which performs the steps of moving the selected page break to the new location and adjusting the remainder of the document to accommodate the page-break at the new location as taught by Michelman Col 4 Lines 45-49.

In regard to dependent claim 2, Michelman does not specifically teach of a handwriting system being a personal digital notepad. However, Ruedisueli teaches that the system includes an electronic notepad and can also include devices operatively connected to the electronic notepad for operating with the electronic notepad to receive, manage, merge, and/or display the electronic copies from the electronic notepad. (Ruedisueli Abstract Lines 8-12; compare with claim 2, "...the handwriting system is a personal digital notepad."). It would have been obvious to one of ordinary skill at the time of the invention to apply Ruedisueli to Michelman, providing Michelman the benefit of having a system includes an electronic notepad and can also include devices operatively connected to the electronic notepad for operating with the electronic

notepad to receive, manage, merge, and/or display the electronic copies from the electronic notepad as taught by Ruedisueli Abstract Lines 8-12.

In regard to dependent claim 3, Michelman teaches of "A System Process performs the steps of moving the selected page-break to the new location and adjusting the scaling and the automatic page-breaks for the remainder of the document to accommodate the page-break at the new location. (Michelman Abstract Lines 5-9; compare with claim 3, "...automatically inserting the one or more identified potential page breaks in the electronic document").

In regard to independent claim 4, Michelman teaches, "A User Interface Process provides a graphical user interface allowing a user to select a page-break within an electronic document and then identify a new location for the page-break." (Michelman Abstract 2-5; compare with claim 4, "...presenting the one or more identified potential page breaks to a user for approval to automatically insert the one or more identified potential page breaks in the electronic document.")

In regard to independent claim 24, claim 24 incorporates substantially similar subject matter as claimed in claim 1, and in further view of the following, is rejected along the same rationale.

Michelman teaches that the "program modules may be physically located in different local and remote memory storage devices." (Michelman Column 6 Lines 32-34; compare with claim 24; "...a memory"). Michelman also teaches that "Moreover, those skilled in the art will appreciate that the invention may be practiced with other computer system configurations, including hand-held devices, multiprocessor systems, microprocessor-based or programmable

consumer electronics, minicomputers, mainframe computers, and the like." (Michelman Column 7 Lines 48-53; compare with claim 24, "...at least one processor").

In regard to independent claim 25, claim 25 reflects similar subject matter as claimed in claim 1 and is rejected along the same rationale.

Claim 11, is rejected under 35 U.S.C. 103(a) as being unpatentable over Michelman et al. (herein after Michelman) in view of Ruedisueli et al. as applied to claim 1, and in further view of Forcier, U.S. Patent No. 6,502,114 B1 filed October 1998 issued December 2002 and in further view of Johari at al. (herein after Johari), U.S. Patent No. 5,911,146 filed May 1996 issued June 1999.

In regard to dependent claim 11, Michelman does not specifically teach of an insertion point. However, Johari teaches of "A modification or perturbation is a randomly selected change to one of the values defining the candidate solution. For example, a page break in the advertisement stream can be changed by randomly selecting one page break to delete and/or randomly selecting a page break to insert in the advertisement stream. (Johari Column 6 Lines 19-24; compare with claim 11, "...a confidence measure for the potential page break associated with the possible insertion point.") It would have been obvious to one of ordinary skill at the time of the invention to apply Johari to Michelman, providing Michelman the benefit of determining a confidence measure for a potential page break insertion that can be randomly selected.

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Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michelman et al. in view of Ruedisueli et al. as applied in claim 1, and in further view of Mishra et al. (herein after Mishra), U.S. Patent No. 5,805,118 filed December 1995 issued September 1998.

In regard to dependent claim 19, Michelman does not specifically teach of a learning algorithm. However, Mishra teaches of a Display Protocol Specification and Learning Algorithm (Mishra Column 8 Line 4; compare with claim 19, "... identifying one or more potential page breaks further comprises the steps of utilizing a learning algorithm.") It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Mishra to Michelman, providing Michelman the benefit of utilizing a learning algorithm.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michelman et al. in view of Ruedisueli et al. as applied to claims 1, 5 and 6, in further view of Forcier et al. as applied to claims 1,5, and 7, and in further view of Nakai et al. (herein after Nakai), U.S. Patent No. 5,909,221 filed December 1995 issued June 1999 and in further view of Johari at al. (herein after Johari), U.S. Patent No. 5,911,146 filed May 1996 issued June 1999.

In regard to dependent claim 23, Michelman does not explain the scoring procedure. However, Johari teaches of "A computer-based system for automatic pagination and layout of yellow pages or a commercial telephone directory uses a simulated annealing heuristic to refine a randomly determined candidate solution. The text and advertisements which are to be included in the yellow pages directory are ordered in two distinct data streams representing the

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order of text and the order of advertisements in the directory. The system determines a possible layout, called a candidate solution, by randomly setting parameters defining the pagination and These parameters may include page breaks in the advertisement stream, column numbers for each advertisement, and an amount of padding or empty space to be added to each Once the parameters are set, the individual pages are laid out by putting the advertisements in the next available position in their assigned columns, and the text around the advertisements. The solution is scored based upon the guidelines for the format and layout of the yellow pages directory. The solution is then optimized using a simulated annealing heuristic, which utilizes small modifications or perturbations randomly made to the initial parameters of the candidate solution. The revised solution is scored and compared to the score of the prior solution. The revised solution is then kept according to a probabilistic formula relating the two scores. Through an iterative process of perturbations, scoring, and comparing, the candidate solution becomes optimized. The process is repeated multiple times for different initial candidate solutions, each of which is randomly determined. A best solution is then selected from all of the optimized candidate solutions." (Johari Abstract Lines 1-30; compare with claim 23, "...automatically identifying one or more potential page breaks further comprises the step of identifying a potential page break as a point offset from a possible insertion point determined in accordance with a scoring procedure." In would have been obvious to one of ordinary skill at the time of the invention to apply Johari to Michelman, providing Michelman the benefit of applying the scoring procedure to the page breaks.

### Response to Arguments

In claim 1, the applicant indicates inserting one or more page breaks in the electronic document and also maintaining page correspondence between an electronic and a physical document in a handwriting system, however it is unclear weather the asynchrony of the pages are electronic and physical pages that are related. The claim does not explain what is meant by asynchrony.

It is also well known in the art that word processors as well as hand written pen-based text can be used for text data. It is well known that both environments can be introduced in identifying page breaks.

The applicant argues that the prior art does not mention that the potential page breaks are not automatically identified (Page 7 Para 1-3). However, in Michel man, a system process performs the steps of moving the selected page break to the new location and adjusting the scaling and the automatic page-breaks for the remainder of the document to accommodate the page break at the new location. (Michelman Abstract)

Regarding claims 1, 24 and 25 Applicant argues that there is lack of motivation as to why Michelman would be combined with Ruedisueli (Page 4 Para 6 and 7). Michelman would be motivated to add to the electronic notepad, which includes devices operatively connected to the electronic notepad for operating with the electronic notepad to receive, manage, merge, and/or display the electronic copies from the electronic notepad as taught by Ruedisueli Abstract Lines 8-12 to the automatic page break pagination which performs the steps of moving the selected page break to the new location and adjusting the remainder of the document to accommodate the page-bréak at the new location as taught by Michelman Col 4 Lines 45-49.

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Regarding claim 2, Ruedisueli teaches that the system includes an electronic notepad and can also include devices operatively connected to the electronic notepad for operating with the electronic notepad to receive, manage, merge, and/or display the electronic copies from the electronic notepad (Ruedisueli Abstract Lines 8-12; compare with claim 2, "...the handwriting system is a personal digital notepad."). It is also well known in the art that word processors as well as pen-based text can be used for text data. It is well known that both environments can be introduced in identifying page breaks.

Regarding claim 3, Michelman teaches of "A System Process performs the steps of moving the selected page-break to the new location and adjusting the scaling and the automatic page-breaks for the remainder of the document to accommodate the page-break at the new location. (Michelman Abstract Lines 5-9; compare with claim 3, "...automatically inserting the one or more identified potential page breaks in the electronic document").

Regarding claim 4, Michelman teaches, "A User Interface Process provides a graphical user interface allowing a user to select a page-break within an electronic document and then identify a new location for the page-break." (Michelman Abstract 2-5; compare with claim 4, "...presenting the one or more identified potential page breaks to a user for approval to automatically insert the one or more identified potential page breaks in the electronic document.")

Regarding claim 11, Michelman does not specifically teach of an insertion point. However, Johari teaches of "A modification or perturbation is a randomly selected change to one of the values defining the candidate solution. For example, a page break in the advertisement stream can be changed by randomly selecting one page break to delete and/or

randomly selecting a page break to insert in the advertisement stream. (Johari Column 6 Lines 19-24; compare with claim 11, "...a confidence measure for the potential page break associated with the possible insertion point.") It would have been obvious to one of ordinary skill at the time of the invention to apply Johari to Michelman, providing Michelman the benefit of determining a confidence measure for a potential page break insertion that can be randomly selected.

Regarding claim 19, Michelman does not specifically teach of a learning algorithm. However, Mishra teaches of a Display Protocol Specification and Learning Algorithm (Mishra Column 8 Line 4; compare with claim 19, "... identifying one or more potential page breaks further comprises the steps of utilizing a learning algorithm.") It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Mishra to Michelman, providing Michelman the benefit of utilizing a learning algorithm.

Regarding claim 23, Michelman does not explain the scoring procedure. However, Johari teaches of "A computer-based system for automatic pagination and layout of yellow pages or a commercial telephone directory uses a simulated annealing heuristic to refine a randomly determined candidate solution. The text and advertisements which are to be included in the yellow pages directory are ordered in two distinct data streams representing the order of text and the order of advertisements in the directory. The system determines a possible layout, called a candidate solution, by randomly setting parameters defining the pagination and layout. These parameters may include page breaks in the advertisement stream, column numbers for each advertisement, and an amount of padding or empty space to be added to each page. Once the parameters are set, the individual pages are laid out by putting the advertisements in the next

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available position in their assigned columns, and the text around the advertisements. The solution is scored based upon the guidelines for the format and layout of the yellow pages directory. The solution is then optimized using a simulated annealing heuristic, which utilizes small modifications or perturbations randomly made to the initial parameters of the candidate solution. The revised solution is scored and compared to the score of the prior solution. The revised solution is then kept according to a probabilistic formula relating the two scores. Through an iterative process of perturbations, scoring, and comparing, the candidate solution becomes optimized. The process is repeated multiple times for different initial candidate solutions, each of which is randomly determined. A best solution is then selected from all of the optimized candidate solutions." (Johari Abstract Lines 1-30; compare with claim 23, "...automatically identifying one or more potential page breaks further comprises the step of identifying a potential page break as a point offset from a possible insertion point determined in accordance with a scoring procedure." In would have been obvious to one of ordinary skill at the time of the invention to apply Johari to Michelman, providing Michelman the benefit of applying the scoring procedure to the page breaks.

For all of the above reasons, the rejection of claims 1, 2, 3, 4, 11, 19, and 23-25 are maintained.

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Respectfully submitted,

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Art Unit 2178
5/26/2005

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